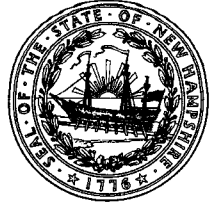




The State of New Hampshire
Department of Environmental Services



Michael P. Nolin
Commissioner

August 18, 2004
Letter of Deficiency
DSP#04-029

Mr. Russell Bailey, Town Manager
Town of Seabrook
P.O. Box 456
Seabrook, NH 03874

RE: Secord Pond Dam #215.02, Seabrook

Dear Mr. Bailey:

The Department of Environmental Services, Dam Bureau (DES) consistently strives to enhance the safety of dams in New Hampshire through its dam safety program. One of the many instruments that play a part in reaching this goal is our inspection program. DES is forwarding this correspondence to you to advise you that in accordance with RSA 482:12 and Env-Wr 502.02, an inspection of the subject dam was conducted on May 7, 2004. During this visual inspection and/or file review, the following deficiencies were observed:

1. There was erosion with a trace of seepage at the corner of the right downstream spillway abutment/training wall;
2. Approximately 10 feet downstream of the right abutment/training wall heavy seepage/water flow was observed. It should be noted that this appears to be the location where the temporary outlet pipe, during the previous reconstruction project, had been placed;
3. There was erosion at the left downstream spillway abutment/training wall;
4. There were two trees within 20 feet of the left downstream spillway abutment/training wall. One tree was at the toe of the embankment and the other was in the slope of the embankment. The tree at the toe of the embankment within 5 feet of the downstream spillway apron and abutment wall was undermined due to the previous construction and continued erosion;
5. A fallen tree was approximately 10 feet downstream of the spillway apron within the outlet channel;
6. The left and right embankment crest was approximately 18 inches lower than the crest of the concrete training walls of the spillway. However, it should be noted that at the peak of the 100-year, 24-hour storm event there would still be 0.75 feet of remaining freeboard and at the peak of the 50-year, 24-hour storm event there would be 1.1 feet of freeboard remaining. Additionally, Mr. Starkey indicated that they left the embankment lower to keep snowmobiles from falling into the stoplog section;
7. There was erosion at both the left and right upstream wingwalls for the overflow spillway;

8. The embankment was in need of annual mowing to eliminate the propagation of brush and tree growth;
9. A small amount of debris was observed upstream of the stoplogs; and
10. At the right earth abutment the embankment is approximately 3.5 feet lower than the top of the spillway concrete abutments as was determined with a hand level at the time of the inspection. It should be noted that during a storm event this area could be overtopped by up to 2 feet.

DES believes that the above deficiencies can be corrected by performing the following items by the indicated schedule:

December 1, 2004:

1. Repair the erosion at the corner of the right downstream spillway abutment/training wall. It should be noted that filter fabric with riprap should be placed in this location, as there is active seepage;
2. Investigate and develop a plan for repair (approved through our office) at the area of heavy seepage/water flow approximately 10 feet downstream of the right abutment/training wall;
3. Repair the erosion at the left downstream spillway abutment/training wall similar to the repair to be conducted for No. 1 above;
4. Remove the two trees within 20 feet of the left downstream spillway abutment/training wall. The stump and undermined root system should be removed upon cutting of the tree at the toe of the embankment within 5 feet of the downstream spillway apron and abutment wall;
5. Remove the fallen tree from the downstream outlet channel and any other debris on a periodic basis;
6. Repair the erosion at both the left and right upstream wing walls for the overflow spillway. It should be noted that this may include the placement of large sized riprap on filter fabrics to eliminate further erosion;
7. Increase the height of the right earth abutment/embankment to be no less than 18 inches below the top of the spillway concrete abutments. The crest of the embankment should be no less than 6 feet wide with 2.5 horizontal to 1 vertical slopes and the material should be compacted in place. The material to be used shall be approved through our office;

Monitor Continually:

8. At this time the left right embankment crest, which was approximately 18 inches lower than the crest of the concrete training walls of the spillway, can remain 18 inches lower as there is adequate freeboard at the peak of the design storm. However, this situation should be monitored

Letter of Deficiency
Dam #215.02/DSP#04-029
August 18, 2004
pg. 3

on a regular basis and if the operations/hydraulics of the dam change with time the embankments should be raised to meet demand; and

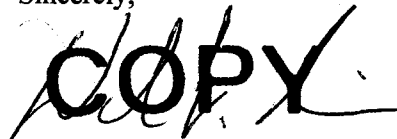
9. Mow the embankments annually to eliminate the propagation of brush and tree growth and to stimulate the growth of a good grass cover.

DES is requesting that you complete and submit the attached "Intent to Complete Repairs" form, within 30 days of receipt of this letter, that will provide for correction of the identified deficiencies by the date(s) indicated above. Please call or write to our office if the repairs are completed ahead of the aforementioned schedule so that DES may schedule a follow-up inspection. Unless notified otherwise, DES will conduct the follow-up inspection on or after the date(s) indicated above. If you believe changes to the items of work or dates are necessary, please make the changes directly on the form and provide a brief explanation. We have enclosed a self addressed stamped envelope for you to return this form.

Our intent in sending you this correspondence is to make you aware of items that DES believes warrant your attention to insure the continued safe operation of your dam. It is our hope that, through the submittal of the attached form and a commitment to keeping a well-maintained dam, you will voluntarily comply with the requested items of work. If we do not receive the intent form or a similarly adequate written reply, we will assume that you are in agreement with our findings and recommendations and DES will carry out follow-up inspections accordingly.

If you have any questions or comments regarding this Letter of Deficiency or would like to be present at future inspections, please contact me at 271-3406, or write to the Water Division at the address listed on the bottom of the cover page.

Sincerely,

A large, stylized handwritten signature in black ink, appearing to read "COPY" with a flourish underneath.

Dale F. Guinn, P.E.
Dam Safety Engineer

Attachments: DB8, DB13, Sketch Illustrating Deficiencies

cc: Gretchen R. Hamel, Legal Unit Administrator ✓

John Starkey, Public Works Director, Town of Seabrook

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